CHAPTER IV

RESEARCH FINDING AND DISCUSSION

This chapter describes research finding and discussion. It discusses about the description of data, the result of normality and homogeneity testing, data analysis, hypothesis testing, and discussion of finding.

A. The Finding

1. The Students' Achievement in Reading Comprehension

In this research, the researcher used quantitavie research design and also did the pre-experimental research. The purpose of this research is to know the effectiveness of using GIST (Generating Interaction Between Schemata and Text) strategy on students' reading comprehension at the second grade of MAN 1 Tulungagung. The sample of study consisted of 30 students in the eleventh grade of MIA U2. The researcher did pre − test and post − test to know whether there is a significant difference before and after being taught by using GIST (Generating Interaction between Schemata and Text) strategy. The researcher administered tests before and after the treatment. After that, in scoring each students, the research used the simple formula. If it was true would get score 1 and if it was false would get score 0. So it must base on the answer key. If all the tests were correct, the total score was 25. Because of the questions were 25 items. The tests used for either pre − test or post − test were different questions, but the indicators tested was the same.

The researcher used three steps in conducting the research, there were pre−test, treatment by using GIST strategy, and post−test. The first step was

giving pre–test. Students had to answer the questions about hortatory exposition text. The questions consisted of 25 items in multiple choice form where each item had five choices namely A, B, C, D, E. The time allocation was about 60 minutes. The respondets of this research was 30 students. The test was conducted by the researcher before giving treatment GIST strategy. Besides, the test was also conducted to know the students' achievement in reading comprehension before being taught by using GIST strategy. Pre–test was conducted on Friday, 15th February 2019 at the eleventh class MIA U2 of MAN 1 Tulungagung.

The second step was giving the treatment. The researcher used GIST strategy to apply the treatment. GIST strategy helped students to comprehend the reading text on hortatory exposition text easily. The first treatment was conducted on Friday, 22nd February 2019 at the class XI MIA U2. The second treatment was conducted on Friday, 8th March 2019. The last treatment was conducted on Friday, 15th March 2019. Each treatment has different topic. During the accomplishment of the first treatment, the researcher gave the explanation about hortatory exposition text first. Then, the researcher explained a strategy which make them easy to comprehend the text, that is GIST strategy. The researcher guided them in using this strategy. They worked collaboratively. The students were asked to follow the procedure of the strategy step by step.

The last step was giving post–test. Students had to answer the questions about hortatory exposition text. The questions consisted of 25 items in multiple

choice form where each item had five choices they were A, B, C, D, E. The time allocation was about 60 minutes. The reading text in post–test was different from pre–test. The test was conducted after the given treatment and also intended to know students' achievement in reading comprehension after being taught by using GIST strategy. After obtaining the pre-test and post–test scores, the researcher used SPSS 18.0 to calculate the desciptive statistics data and frequency of score:

a. **Students' Achievement in Reading Comprehension Before Being Taught By Using GIST Strategy**

The data of students' achievement before being taught by using GIST strategy can be seen at the table below:

Table 4.1 The Student's Score Pre – test

No.	NAMA SISWA	PRE-TEST
1.	AS	16
2.	ASMS	19
3.	BMNA	19
4.	DS	15
5.	DRH	16
6.	EPNO	16
7.	FIA	19
8.	FZ	18
9.	HAS	15
10.	IHB	21

11.	IC	18
12.	JFR	14
13.	KZK	19
14.	MZI	14
15.	MS	16
16.	MER	17
17.	MAPS	15
18.	MAZ	14
19.	MCM	17
20.	MA	18
21.	MZBH	16
22.	NSH	14
23.	NLH	15
24.	OMS	16
25.	SAPK	18
26.	SC	18
27.	SNT	19
28.	TTD	18
29.	WH	14
30.	ZFA	16

Table 4.2 Descriptive Statistics of Pre – Test

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
pre_test	30	14	21	16,67	1,918
Valid N (listwise)	30				

Based on the table 4.1, there were 30 students as sample of this research. The name of students had been mentioned by their initials to keep the privacy of the students. The researcher administered the test before being taught by using GIST strategy. The test consisted of 25 questions about hortatory exposition text in multiple choice form. The Table 4.2 showed the descriptive statistics of pre–test. The mean score of pre–test was 16.67; the median score was 16 and the mode score was 16. The minimum and maximum score from the pre – test score were 14 and 21. The standard deviation was 1.918. So, the table descriptive statistics of pre-test which used to test the hypothesis was the mean score.

Table 4.3 Frequency of Pre – Test Score

pre_test

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	14	5	16,7	16,7	16,7
	15	4	13,3	13,3	30,0
	16	7	23,3	23,3	53,3
	17	2	6,7	6,7	60,0
	18	6	20,0	20,0	80,0
	19	5	16,7	16,7	96,7
	21	1	3,3	3,3	100,0
	Total	30	100,0	100,0	

From the table 4.3, we get frequency of pre–test described the precentage of this score. I t was started from the minimum untill the maximum. There were nine students who got score 14 and 15, percentage of this score was 30 %. It showed that their achievement on reading comprehension were categorized as poor. Meanwhile, there were nine students who got score 16 and 17, percentage of this score was 30 %. It showed that their achievement on reading comprehension were categorized as average. Moreover, there were eleven students who got score 18 and 19, percentage of this score was 36.7 %. It showed that their

achievement on reading comprehension were categorized as good. Finally, only a student who got the highest score or the maximum score, it was 21. The percentage of this score was 3.3 %. It was categorized as very good. Based on the explanation above, it can be said that before being taught by using GIST strategy, there were still any students who got poor score. It showed that they didn't understand well about reading text, especially hortatory exposition text.

b. **Students' Achievement in Reading Comprehension After Being Taught By Using GIST Strategy**

The data of students' achievement after being taught by using GIST strategy can be seen at the table below:

Table 4.4 The Students' Score Post – Test

No.	NAMA SISWA	POST-TEST
1.	AS	19
2.	ASMS	21
3.	BMNA	23
4.	DS	22
5.	DRH	21
6.	EPNO	19
7.	FIA	24
8.	FZ	23
9.	HAS	24
10.	IHB	21

11.	IC	20
12.	JFR	19
13.	KZK	23
14.	MZI	22
15.	MS	21
16.	MER	24
17.	MAPS	18
18.	MAZ	23
19.	MCM	22
20.	MA	22
21.	MZBH	21
22.	NSH	22
23.	NLH	20
24.	OMS	23
25.	SAPK	22
26.	SC	20
27.	SNT	21
28.	TTD	20
29.	WH	23
30.	ZFA	20

Table 4.5 Descriptive Statistics of Post - Test

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
post_test	30	18	24	21,43	1,633
Valid N (listwise)	30				

Based on the table 4.4, there were 30 students as sample of this research. The name of students had been mentioned by initial name tokeep the privacy of the students. The researcher administered the test after being taught by using GIST strategy. The test consisted of 25 questions about hortatory exposition text in multiple choice form. The texts were different with the texts in pre–test. According to the table 4.5, showed the descriptive statistics of post–test. The mean of post–test was 21.43. While the median score was 21 and the mode score was 21. The minimum and maximum score from the post–test score were 18 and 24. The standard deviation was 1,633. So, the table descriptive statistics of post-test which used to test the hypothesis was the mean score.

Table 4.6 Frequency of Post – Test

post_test

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 18	1	3,3	3,3	3,3
19	3	10,0	10,0	13,3
20	5	16,7	16,7	30,0
21	6	20,0	20,0	50,0
22	6	20,0	20,0	70,0
23	6	20,0	20,0	90,0
24	3	10,0	10,0	100,0
Total	30	100,0	100,0	

Table 4.6 frequency of post – test described the precentage of this score. It was started from the minimum untill the maximum. There were four students who got score 18 and 19, percentage of this score was 13.3 %. It showed that their achievement on reading comprehension were categorized as good. Meanwhile, there were seventeen students who got score 20, 21 and 22, percentage of this score was 56.7 %. It showed that their achievement on reading comprehension were categorized as very good. Moreover, there were nine students who got score 23 and 24, percentage of this score was 30 %. It showed that their achievement on reading comprehension were categorized as excellent. Based on the

explanation above, it can be said that after being taught by using GIST strategy, a half numbers of students have very good score. It showed that students improved their understood about reading text on hortatory exposition text well.

c. The Result of Normality and Homogeneity Testing

1) The Result of Normality Test

The normality test was used to measure whether the data in the experimental class was normally distributed or not. T-test was used when the population was normally distributed or approximately normally distributed. The researcher used Kolmogorov-Smirnov test with SPSS 18.0 to know the normality by the value of significance (α) = 0.05.

The criteria of acceptance of the hypotheses for normality test were:

Ho is accepted if Sig. (Pvalue) > α = 0.05

Ha is accepted if Sig. (Pvalue) < α = 0.05

The hypotheses were:

Ho : The data were normally distributed.

Ha : The data were not normally distributed.

The result of normality test can be seen in the table below:

Table 4.7 The Result of Normality Test

One-Sample Kolmogorov-Smirnov Test

		pre_test	post_test
N		30	30
Normal Parameters[a,b]	Mean	16,67	21,43
	Std. Deviation	1,918	1,633
Most Extreme	Absolute	,169	,136
Differences	Positive	,169	,110
	Negative	-,157	-,136
Kolmogorov-Smirnov Z		,927	,743
Asymp. Sig. (2-tailed)		,356	,639

a. Test distribution is Normal.

b. Calculated from data.

Based on the table 4.7, it can be seen that the Pvalue (Sig.) was 0.356 for pre-test and 0.639 for post test. Because the Pvalue (Sig.) of experimental class > α = 0.05. It can be concluded that both of the data pre-test and post-test score were normal ((0.356 > 0.05) and (0.639 > 0.05)). So, Ho is accepted and Ha is rejected. It means that the data of experimental class was distributed normally for pre – test and post - test.

2) **The result of Homogeneity Test**

Homogeneity test was done to know whether the data in the experimental class were homogeneous or not. The researcher used Test of Homogeneity of Variances with SPSS 18.0 by the value of significance (α) = 0.05. The result can be seen in the table below:

Table 4.8 The Result of Homogeneity Test

Test of Homogeneity of Variances

pre_test post_test

Levene Statistic	df1	df2	Sig.
1,432	1	58	,236

From the table 4.8 it can be described the result of homogeneity testing was 0.236, it could be seen that the Pvalue (*Sig.*) = 0.236 > α = 0.05. It showed that Ho was accepted because of the Pvalue (Sig.) > α = 0.05. It can be concluded that the variances of data was homogeneous.

d. **Data Analysis**

To ensure whether the difference of pre-test and post-test scores is significant or not, the researcher used SPSS 18.0 to calculate the t-value to verify the effectiveness of GIST strategy on students' reading comprehension. The result is as follows:

Table 4.9 Paired Sample Test

Paired Samples Statistics

	Mean	N	Std. Deviation	Std. Error Mean
Pair 1 Post_test	21,43	30	1,633	,298
Pre_test	16,67	30	1,918	,350

Paired Samples Correlations

	N	Correlation	Sig.
Pair 1 Post_test & Pre_test	30	,114	,550

Paired Samples Test

	Paired Differences							
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
				Lower	Upper			
Pair 1 Post_test - Pre_test	4,767	2,373	,433	3,880	5,653	11,000	29	,000

Based on the table 4.9, Paired Sample Test the result of output
paired sample statistics shows that there were mean score differences

between pre-test and post-test. The mean score of pre-test is 16.67 and the mean score of post-test is 21.43. So, the mean score of post-test was higher than the mean score of pre-test. It means that the student's score increase after being taught by using Generating Interaction between Scemata and Text (GIST) in reading comprehension. According to the table 4.9 Paired Sample Test, output paired sample test showed that the result of comparing pre-test and post-test by calculating of T-test. The result showed that mean of pre-test and post-test was 4.767, the standard deviation was 2.373, the standard error mean was 0.433, the lower difference was 3.880, while the upper difference was 5.653. Meanwhile, the result of T-count was 11.000 with df was 29 and significance (2-tailed) was 0.000. The significance value is 0.000 and the significance level is 0.05.

e. **Hypothesis Testing**

From the data analysis above, the hypothesis of the research which used in SPSS 18.0 were:

Ha : There is a significant difference between the students' achievement in reading comprehension before and after being taught by using Generating Interaction between Schemata and Text strategy on hortatory exposition text at the eleventh grade of MAN 1 Tulungagung

Ho : There is no significant difference between the students' achievement in reading comprehension before and after being taught by using

Generating Interactionbetween Schemata and Text strategy on hortatory exposition text at the eleventh grade of MAN 1 Tulungagung

The criteria for acceptance of the hypothesis for the hypothetical test were:

Ho is accepted if Sig. (Pvalue) > α = 0.05

Ha is accepted if Sig. (Pvalue) < α = 0.05

Based on calculating paired sample t-test using SPSS 18.0, the researcher gave interpretation to significant value. The significant value of the research is 0.000, with significant level 0.05. Based on calculating SPSS 18.0 the significant value < significant level (0.000 < 0.05). So, the the null hypothesis (Ho) is rejected and alternative hypothesis (Ha) is accepted. It means that there was significant difference between the students' achievement in reading comprehension before and after being taught by using Generating Interaction between Schemata and Text strategy. Thus, it can be conclude that Generating Interaction between Schemata and Text strategy is effective to teach reading comprehension in the eleventh grade of MAN 1 Tulungagung. (see Appendix 7)

B. Discussion

Based on the purpose of the research, the researcher used quantitative research design. That was to know the effectiveness of using Generating Interaction between Schemata and Text which was implemented in eleventh grade of MAN 1 Tulungagung. The sample of this research was 30 students. The researcher used three steps in conducting the research. At the beginning of

the research, the pre-test was administered to know the students' achievement in reading hortatory exposition text before they were given the treatments. The result showed that the mean score of pre-test in the experimental class was 16,67. It showed that the mean of experimental class was low. After the pre-test, the students were taught by using GIST strategy in the experimental class for three times. Before apply the treatments, the procedures of GIST strategy was explained to the students. After the treatments were done, the post-test for the experimental class was given. The post-test was given to measure the improvement of students' reading comprehension on hortatory exposition text after the treatments. The mean score of post-test was 21,43. Based on the mean of pre-test and post-test scores, it has known that mean score of post-test higher than mean score of pre-test. It means that the students' achievement in reading comprehension after being taught by using Generating Interaction between Schemata and Text strategy was improved. It means that there was significant different before and after being taught by using Generating Interaction between Schemata and Text strategy. (see Appendix 4)

Next, to know the effectiveness of Generating Interaction between Schemata and Text strategy, the researcher analysis the data used paired sample t-test in SPSS 18.0. T-test analysis shows that the result of T-count was 11,000 with df was 29. The significance value is 0.000 and the significance level is 0.05. It means that the significance value is smaller than significance level (0.000 < 0.05). So, the alternative hypothesis (Ha) is accepted and null hypothesis (Ho) is rejected. It means that there is significant different of

students' achievement in reading comprehension before and after being taught by using Generating Interaction between Schemata and Text strategy.

From the analysis above, we knew that the students who got the treatments by GIST strategy got a better result in teaching reading comprehension on hortatory exposition text. It was proved by the increasing average score in the experimental class (see Appendix 4). GIST Strategy could improve each aspect of students reading comprehension including main idea (topic), expression/idiom/phrases in content, inference (implied detail), grammatical feature, detail (scanning for a specifically stated detail), excluding fact not written, supporting idea, vocabulary in content. The using of GIST strategy could help the students to comprehend the hortatory exposition text by asking the students to read each of the paragraphs and generate their own summary in 15 words or less (see Appendix 7). GIST strategy provides an opportunity for students to identify important vocabulary and synthesize important pieces of information into a summary statement to show the gist of the reading. In this strategy, the students were forced to discard unimportant information so that they may focus on what is significant for them to understand and remember. Also, make the students to find out the main idea easier.

Cunningham in Duke and Pearson stated that "Teaching students to summarize what they read is another way to improve their overall comprehension of text". In this case, by using GIST strategy the students could improve their comprehension of hortatory exposition text. Cunningham (1982)

in Bouchard (2005:40), GIST provides students' opportunity to identify important vocabulary and make a summary statement by synthesizing important pieces of information to show the 'gist' of reading. However, some problems were faced in this research. There were some students still difficult to work together, they passive in the group and they still confuse with the strategy and the text. So an explanation and guide were given to the students to complete their task.

Hence, using Generating Interaction between Schemata and Text made the students easier to comprehend the text and more active. It had been supported by the previous study, such as Junanto (2014), In his research he proved that using GIST in teaching reading descriptive text can improve students' reading comprehension. Second study is conducted by Lestari (2017). In her research GIST strategy was effective to teach reading comprehension in descriptive text. The third study is Indra, Mukhaiyar, Yenni (2013) in Jurnal English Language Teaching (ELT) which conclude that GIST gives the opportunities to the students to work cooperatively, stimulate students' creativity, and background knowledge as well as schemata, giving the chance to share their idea and feeling in reading hortatory exposition.

Based on the explanation above, the GIST strategy was effective for the students on reading hortatory exposition text. Where their summarization of the text could make them understand the content of the text. The findings of the study proved the theory about GIST proposed by Cunningham saying that the

GIST strategy was effective in teaching reading hortatory exposition text comprehension.